

Title (en)

Method of making a composite leaf spring for determining the magnitude of a load and a composite leaf spring manufactured by said method.

Title (de)

Herstellverfahren für eine zusammengesetzte Blattfeder, die zur Lastbestimmung dient, und eine mit diesem Verfahren hergestellte Blattfeder.

Title (fr)

Procédé de fabrication d'un ressort à lames pour déterminer la grandeur d'une charge et ressort à lames réalisé par ledit procédé.

Publication

**EP 0044191 A1 19820120 (EN)**

Application

**EP 81303107 A 19810708**

Priority

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Abstract (en)

[origin: US4411159A] A member of composite material incorporates at least one strain responsive member within a part at which a strain is induced by a load in use. A signal which is a function of a strain detected by the strain responsive member is communicated to an indicator or monitoring device which registers the applied load causing the strain. In one embodiment a leaf spring for a vehicle comprises upper and lower elements of one or more superimposed strips of pre-impregnated longitudinally extending carbon fibres and an inner element of one or more strips of pre-impregnated glass fibres. During laying up of the strips two strain gauges (13, 14), which may be on or integral with a carrier strip, and their leads (13a, 13b, 14a, 14b) are introduced into the active length of the spring which experiences a bending moment on the application of a load. The gauges are positioned at a pre-determined distance apart which is maintained when the member is cured, as by hot press moulding.

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IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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